JAN 31 1958
BUSINESS SERVICE
ELLIS & COMPANY

INDEX

Volumes II and III are indexed below. The hyphenated numbers following the alphabetized entries indicate volume, issue, and page number in that order. Because of the dynamic nature of the field of electronic data processing, it is believed that Volume I is of little current value, hence it has not been included.

Academy of Advanced Management (AMA), 3-6-4
Accountants & electronics, 3-2-1, 5
Accountants and O.R., 3-1-13, 2-5-6
Accounting, 2-6-5
Accounting, automation, 3-6-6
Accounting and Engineering share computer time, 2-12-5
Accounting by electronics, 3-1-12, 2-5-4, 2-7-13, 2-8-7
Accounting by Electronic Data Processing, 3-10-9
Accounting measurements, 3-3-4
Accounting system, 3-1-1
Ackoff, Russell L., 2-4-9, 3-3-8, 3-8-1
Adams, Charles W., 2-7-13
Addressing, random access, 3-6-10
Addressograph, 2-2-9, 2-4-11, 2-7-16
Administrating a Conversion to Electronic Accounting, 3-5-2
ADP, 2-4-8
Air Materiel Command, 2-1-4
Air Research & Development Command, 3-11-8
Air Traffic Control, 3-1-6
Airline Automation, 3-10-10
Airlines, 2-10-7, 2-11-9, 2-8-9, 3-12-13
Airlines application, 2-3-6, 2-11-9
Airlines reservations, 2-5-14, 2-10-7, 3-10-12
Allstate Insurance, 3-4-6
American Airlines, 2-5-14, 2-8-9, 3-10-10
American Bankers Assoc., 2-1-13, 2-3-10, 2-9-7, 2-10-8, 2-11-6, 10, 11; 2-12-6, 8
American Bridge Div., U.S. Steel, 2-4-2
American Chemical Society, 2-1-7
American Documentation Institute, 2-2-7
American Gas Assoc., 2-3-10
American Management Assoc., 2-6-16, 2-10-4, 2-11-4, 2-12-3, 3-3-3, 3-4-12, 3-5-3, 3-6-4
AMA "Electronics at Work", 2-4-1, 2, 3, 4; 2-5-4, 2-10-4, 2-12-7
AMA Office Management Series, 2-2-14
AMA Special Report #11, 2-11-4
American Telephone and Telegraph Co., 3-11-5
Analog computers for OR, 2-8-13
Analog-to-digital conversion, 2-2-3
Anthony, Robert N., 3-8-7
Application of data processing equipment and systems, 2-1-3, 2-10-2, 4
Applications, airlines, 2-8-9, 2-11-9, 3-12-13
Applications, banking, 3-4-3, 3-5-9, 10; 3-7-6, 3-9-7, 3-11-9
Applications, chemical companies, 3-1-15
Applications, credit operations, 3-6-8, 3-11-7
Applications, engineering, 2-11-7
Applications, financial data, 3-11-6
Applications, highways, 3-11-8
Applications, hospital and medical records, 2-12-8
Applications, life insurance, 3-2-7, 2-6-1, 2-8-15, 2-11-12, 13; 2-12-7, 3-5-11
Applications, personnel selection, 3-11-8
Applications, pipelines, 2-12-8
Applications, purchasing, 2-7-15, 2-11-13
Applications, railroads, 3-7-3, 3-8-12
Applications, retail, 2-9-9, 11; 3-3-5, 3-5-11, 12, 13
Applications, sales statistics, 3-9-10
Applications, stocks, 3-5-12
Applications studies, 3-10-3, 4, 6
Applications, tax payment, 3-11-8
Applications, utilities, 2-1-2, 3-12-4
Aptitude tests-programmers, 3-1-16
Armed Forces EDP planning, 2-9-1
Armour Research Foundations, 3-6-7
Army Electronic Proving Ground, 2-5-10
Association for Computing Machinery, 2-1-1
Atlanta First National Bank, 3-8-13
Auditing by electronics, 3-2-5
Auditing, EDP, 3-7-5
Auditing Electronic Records, 3-3-1
Auditor, 3-4-1
Automated Data Processing, 2-4-8
Automatic coding, 2-4-10
Automatic Coding Symposium, 3-6-11, 3-10-13
Automatic Coding Techniques, 3-6-13

Automatic control, 2-8-7
Automatic data processing, 2-1-11
Automatic Data Processing Service, 2-7-9
Automatic digital computers, 2-10-6
Automatic machining, 2-1-15
Automatic Programming, 2-1-8, 2-4-10, 2-5-13, 2-6-11, 12; 2-2-10, 3-8-13
Automation, 3-6-8, 3-8-10
Automation, accounting systems, 3-6-6
Automation, effect on man, 3-2-6
Automation, England, 2-10-5
Automation Handbook, 2-1-7
Automation in Business and Industry, 3-5-4
Automation of Bank-Check Accounting, 3-5-9
Babcock, W. D., 2-11-13
Bagby, Wesley S., 2-5-2, 2-10-3
Balet, J. W., 2-7-14
Ballistics Research Labs, 3-5-13
Bank Applications, 3-5-10, 3-6-7, 3-7-6, 3-8-13, 3-9-7, 3-10-14, 3-11-9
Banking, 2-8-15, 2-9-7, 2-10-8, 2-11-6, 11; 2-12-6, 3-4-3, 3-4-10
Banking & electronics, 2-6-7, 9; 3-6-12
Banking, common language, 3-7-9
Banking electronics, 2-11-6, 10; 2-1-6, 7, 13; 2-3-10, 2-5-14, 3-6-7
Bank-o-matic, 2-1-6
Bank of America, 2-1-7, 2-3-16, 3-4-3, 3-8-12
Banks, 2-1-7, 2-2-2, 2-5-14, 2-6-9, 2-8-15, 2-10-8, 3-1-15, 2-12-6
Basic reading list, 2-2-16
Beals, Robert P., 2-1-1
Becker, Esther, 3-4-7
Bell, William D., 3-10-6
Bell Telephone Laboratories, 3-9-12
Benser, E. G., 3-5-8
Benson, Bernard S., 2-2-3
Benson-Lehner, 2-2-3
BEPOC, 3-5-13
Berkeley, Edmund C. and Lawrence Wainwright, 2-8-10
Bibliography, 2-2-16, 2-6-6, 2-4-6, 2-8-4, 3-4-10, 3-11-12
Bibliography, accounting, 3-3-4
Binary number system, 2-1-14
BIZMAC Electrofax printer, 2-10-8
Blue sky approach, 3-8-14
"Brain simulator", 3-4-11
Brayer, Herbert O., 2-1-10, 2-2-15, 2-8-15
Bright, James R., 2-1-9
Brown, R. Hunt, 2-1-12, 2-3-3, 2-6-10, 2-8-9, 2-2-2
Bruce, R. T., 2-4-4
Building blocks, 2-5-14
Bureau of the Budget, 2-2-15
Bureau of Labor Statistics, 2-6-1
Burroughs, 2-1-6, 13; 2-8-9
Burroughs "BEPOC", 3-5-13
Business data processing, 2-11-3
Business Electronics Inc., 2-8-16, 3-4-13, 3-9-5
Business systems engineering, 2-2-4,11; 2-3-7, 2-4-7, 2-7-13, 2-10-1
Buy or rent, 3-8-7
Buying EDP Systems, 2-5-15, 2-6-14
C & O RR, 2-8-1, 3-10-12
Calhoun, Everett S., 2-9-4
Canada, IDP, 2-11-7, 3-12-8
Canadian National RR, 2-6-6
Canning, Richard G., 2-3-7, 2-4-7, 2-5-4, 2-6-2, 3-4-13
Carlin, F. C., 2-12-5
Carlson, Arthur E., 3-6-6
Carr, John W., 2-6-5, 3-10-8
Carson, August J., 2-9-9
Case histories, 3-4-6
Case Institute of Technology, 2-4-9, 2-11-1, 3-8-1, 3-11-3
Case Studies in EDP planning, 2-7-2
Case Study, insurance, 2-6-1
Case Study of the Electronic-Computer System at Farmers Insurance Group, 3-5-11
Centralization of Computing, 2-1-10, 2-9-5, 6
Centralized EDP System, 2-9-5
Champion, George P., 2-12-11
Chapin, Ned, 2-1-11, 13; 2-2-16, 2-6-7, 2-9-13, 2-12-3, 3-12-3, 5
Charts, 2-2-15
Charts of EDP systems, 3-2-1
Check codes, tape transmissions, 3-3-12
Check coding, 3-6-7
Check design, 3-7-9
Check-handling, 2-3-10, 2-11-6
Check posting by electronics, 3-5-10
Check posting (IBM), 3-10-14
Check processing, 2-9-7, 3-5-9
Checking procedures, 3-3-10
Checking techniques, 3-6-11
Chemical applications, 3-1-15
Chemical companies, 2-12-10
Chemical patent search, 3-4-8
Chemical Switch Memory, 3-9-13
Chesapeake & Ohio R.R., 2-8-1, 3-10-12

Chess, 3-10-16
Chrysler Corp., 2-1-1
Chrysler Mopar, 3-10-11
Churchman, G. West, 3-3-8
Cities, use of computers, 3-8-10
Classification by Computer, 3-11-8
Clevite, 2-6-9
Closed circuit TV, 3-2-7
"Closed" shop, 3-8-9
"Cloud 9", 3-11-9
Coded dots, 3-1-14
Coding, 3-9-14
Coding, meanings, 3-9-16
Coleman, John S., 2-6-12
Collins Radio Co. computer installation, 2-8-6
Common-language, 2-1-12, 13; 3-7-9
Commonwealth Edison Co., Chicago, 2-3-10, 2-10-2, 3-4-6, 3-11-10
Company planning, 2-11-8
Competitive-bidding strategy, 2-5-8
Compiler, 2-2-10, 2-5-13
Compiling routine, 2-1-8
Compleat Programmer, 3-12-12
Computer Directory, 2-8-6
Computer feasibility, 3-10, 3, 4, 6
Computer industry, 3-8-9
Computer installations, 3-4-10
Computer staff, 3-4-9
Computers, 2-8-10, 2-10-6
Computers, description, 3-10-7
Computers, England, 2-12-12
Computers, explanation, 3-10-6
Computers, technical description, 3-7-8
Computers-their operation and application, 2-8-10
Computing center, 2-9-14, 3-8-9, 3-12-4
Computing Devices of Canada Ltd., 3-4-13
Computing News, 2-12-9, 2-6-8
Concordance (indexing by electronics), 2-4-12, 2-12-7
Conference on the Practical Utilization of Recorded Knowledge, 3-6-7
Connelly, B. C., 2-1-4
Consolidated Edison Co., 2-3-1, 2-4-3, 2-7-14, 3-11-10
Contract considerations, 2-11-15
Contract factors in purchase or lease, 2-11-15
Contractor's payroll by wire, 3-10-11
Control by electronics, 3-2-5
Control engineering of business systems, 2-10-9
Control, internal, 3-1-12
Control of program runs, 3-9-8
Control system concept of business, 2-7-13
Controller & EDP, 2-6-2
Controllership Foundation, 2-7-2, 2-8-4, 3-2-6, 3-4-10
Controlling a business process, 2-10-9
Controlling units at point-of-sale, 3-5-13
Convair, 2-4-5
Conversion to electronics, 3-5-2
Conway, Ben, 2-5-11
Cooperative EDP, 3-7-5
Coppinger, John M., 3-2-16
Corey, Gordon R., 2-10-2
Cost studies, 2-8-5
Craig, Harold Farlow, 3-5-2
Credit, 3-4-5
Credit, application, 3-11-7
Credit office automation, 3-6-8
Cummins Engine Co., 3-11-3
Customer relations, 3-12-4
Dantzig, George B., 3-8-5
Data needs of business, 3-5-6
Data processing center, 3-7-5
Data processing systems, 2-1-3
Data recognition, 3-9-14
Data Synchronizer, 3-11-5
Databosser, 2-6-10
Datafile, 2-9-12, 3-3-14, 3-8-11, 3-9-11
Datamatic Corp., 2-4-11, 2-5-14, 2-6-10
Datatron, 2-8-15, 3-11-13
De-bugging, 3-6-11
Decentralization, 2-1-10
Decentralized Business Machines, 3-5-7
Denver Research Institute, 3-10-1
Department of Labor, 2-6-1
Dept. of Scientific and Industrial Research (England), 2-10-5
Department store automation, 2-3-3, 2-9-9, 11; 3-10-11
Descriptors, 3-7-6, 3-10-12
Detroit Arsenal, 2-5-3
Detroit Edison, 3-11-10
Deuce, 2-11-11
Diana, 2-1-7, 2-6-9, 2-10-8
Dictionary, math, 3-6-5
Diebold, John, 2-7-9, 3-4-4, 3-10-3
Ditman, J. Howard, 2-5-1
Document Search, 3-7-6
Documentation, 2-2-7, 2-8-7, 2-9-15, 2-12-7, 3-4-12, 3-10-12, 3-11-8, 3-12-2
Dumfy, Arnold I., 3-2-12
DUO, 3-5-14

Eastern Computer Conf., 2-6-7, 2-7-9
Eastman Kodak, 2-7-16, 3-12-2
Ebasco Services Inc., 2-6-3, 4
Eckert, W. J., 2-8-10
EDP in the Navy, 3-5-1
EDP industry, 2-8-4
EDP, preparation, 3-2-6
EDP Service bureau, 2-8-15
EDP System for decentralized organization, 2-9-5
EDP Systems, 2-9-4
EDP - The Modern Management Control, 3-5-1
Eggleston, W. E., 2-3-10
Elecoder, 2-2-10
Elecom, 2-2-10, 2-5-13, 2-10-7
Elecom 125 Business Data Processing System, 2-12-11
ElectroData Programming Bulletin, 3-12-12
Electrofax (RCA), 2-7-16
Electronic accounting, 2-7-13
Electronic Associates, Inc., 2-8-13
Electronic Banking, 3-6-7
Electronic business applications, 2-8-3
Electronic Computers Improve Management Control, 2-12-21
Electronic Data Processing for Business & Industry, 2-4-7
Electronic Data Processing Industry, 2-8-4
Electronic Yardstick, 3-5-12
Electronics at Work, AMA, 2-12-7
Electronics in data processing, 2-10-4
Electronics in management, 2-8-2, 2-9-4, 2-11-1
Electronics in the office, 3-5-8
Elliot, J. Douglas, 3-4-5
Elliott 405, 2-1-6
Elliott Brothers Ltd., 2-1-6
Employee relations, 2-12-10
Engineering and Paperwork Control, 3-5-3
Engineering applications, 2-11-7
Engineering business systems, 2-4-7
England, 2-4-6, 2-6-6, 2-8-7, 14; 2-10-5, 6; 2-11-11, 2-12-12, 3-1-14, 3-3-4, 3-5-8, 3-6-8, 3-8-10, 3-10-9, 3-11-8, 9
England, accountants, 2-8-7
England-automation, 3-6-8, 3-8-10
England, business electronics, 2-4-6
England, computers, 2-10-6
England--computers in business, 2-4-6, 2-6-6, 2-8-14
England, electronic offices, 2-10-5
England, Norwich, 3-11-8
England, payroll application, 2-11-11
England, Status of EDP, 3-5-8
English syntax patterns, 3-8-6
Equipment, 3-10-7
Equipment, buy or rent, 3-8-7
Equipment characteristics, 2-8-11
Equipment description, 3-10-6
Equipment manufacturers, 3-2-5
Equipment survey, 2-8-3
Erie RR, 2-1-5
ERMA, 2-1-7, 2-6-9, 2-3-16, 3-4-3
Ernst & Ernst, 2-8-3
Establishing an integrated data-processing system, 2-11-4
Europe, 3-9-6
European computers, 2-2-15, 3-8-9
European Univac, 2-6-15
Evaluation of EDP, 3-12-5
Even, Arthur D., 2-5-3
Executives and automation, 3-6-7
Experience of EDP users, 2-10-4
Facsimile, 2-5-14
Factory automation, 3-5-4
Fairbanks, Ralph W., 2-1-11, 3-4-5
Farmers Insurance Group, 3-5-11, 3-12-13
Faulkner, Charles E., 3-1-5
Feasibility studies, 2-4-1, 2, 3, 4, 5; 2-10-4, 2-1-13, 2-2-14, 2-2-15, 2-7-1, 3-2-6, 3-12-9
Feasibility Study for Inventory Control Application, 3-11-12
FERUT, 3-8-3
File maintenance, 2-3-1, 6
File Reference, 2-2-5
Files, magnetic, 2-5-14
Film, 2-2-16, 2-10-10, 2-12-21, 2-6-16, 3-7-16
Filmsort, 2-7-16
Financial considerations of EDP, 3-12-5
Financial data computed on IBM 702, 3-11-6
Financial position, 3-2-5
Financial studies in acquiring EDP Systems, 2-6-7
Flexowriter Duplex, 2-6-10
Ford program maintenance, 3-11-1
Foreign computers, 3-8-9
Formula for buying equipment, 2-8-4
Formula for computer feasibility, 2-8-4
Fosdic II, 3-7-13
Frank, Werner L., 2-4-10
Franklin Institute, 3-10-13
Franklin Life Insurance Co., 2-11-12, 3-4-6
Ft. Huachuca, 2-5-10

Garment tag sorter, 2-1-8
Garrott, P. B., 2-2-8, 2-3-5
General of America, 2-8-15
General Electric, 3-11-6
General Electric ferromagnetography (printer), 2-10-9
General Electric honeycomb storage unit, 2-12-12
General Electric lamp division, 3-8-1
General Foods, 2-6-13
General Insurance (Safeco), 2-8-15
Glossary, 2-3-10, 2-8-4, 2-12-10
Grabbe, Eugene M., 2-1-3, 3-5-4
Grade School computer training, 2-9-8
Great Northern RR, 2-6-5, 3-10-13
Gregory, Robert H., 2-5-6, 2-6-6
Gruenberger, Fred, 3-6-11
GUIDE, 3-5-14, 3-12-12
Harris, Walter M., 2-9-5
Hartfield Stores, 3-5-11
Harvard, Automatic Data Processing Conference, 2-8-8
Harvard Business Review, 2-7-3, 2-1-9, 2-4-6
Harvard Business School, 3-4-6, 3-5-2
Harvard Graduate School of Bus. Ad. Student Report, 2-5-10
Harvard University, 2-8-8
Hattery, Lowell H., 2-8-2, 2-9-2, 3-2-4
HEC4, 3-10-9
High school computer training, programing, 2-9-7
High speed printer, 2-8-9, 2-10-8
High-speed printer charting, 2-2-3
High Speed Printer-Plotter, 3-5-13
High speed types, 3-11-5
Highway applications, 3-11-8
Highway design, 2-9-11, 3-6-9
Highway engineering, 2-9-11
Hillyer Transacter, 2-3-4
Hoffman, D. G., 2-1-12
Holberton, Mrs. Frances E., 3-2-9
Hollerith HEC4, 3-10-9
Home study course, 2-8-16
"Honeycomb" Storage Unit, 2-12-12
Hopper, Grace Murray, 2-11-14
Hotel reservations, 2-9-11
Hotpoint Co., 2-4-1
Housing, computer, 2-6-8, 3-4-9
Howard Savings Bank, 2-8-15, 2-10-8
Howell, Frank S., 2-9-10
Hunsberger, Harold, 3-4-9
IBM, 2-2-1, 2-5-13, 2-6-10, 11, 2-11-14
IBM 610 Auto-point computer, 3-11-13
IBM 650, training, 3-11-2
IBM 702, 2-1-1, 2-2-1
IBM 702 computer financial data, 3-11-6
IBM 705 Autocoder, 3-6-13
IBM 705, Canada, 3-10-7
IBM 705 III, 3-11-5, 14
IBM 709, 3-2-8
IBM 774 Data Selector, 3-9-13
IBM - APR, RAM, RAMAC, 2-11-14, 3-9-11
IBM Reserwriter, 2-8-9
IDP, 2-1-12, 2-2-8, 2-3-5, 2-8-6, 2-10-7, 9; 2-11-4, 7, 3-3-3, 3-4-9, 3-7-7
IDP, NOMA film, 3-7-16
Ideas for Management, 3-9-6
Inactive storage costs, 3-7-15
Indexing, 3-10-12
Indexing by electronics, 2-4-12, 2-12-7
Indexing by punch card, 2-12-7
Indexing of documents, 3-7-6
Indexing, RAM Systems, 3-2-12
Industrial automation, 3-5-4
Information engineering, 2-3-7, 2-4-12
Information Processing Equipment, 2-1-7
Information retrieval, 2-9-15, 3-4-8, 3-4-12
Information searching, 3-10-12, 3-12-2
Input system, 3-8-12
Installations, utilities, 3-11-10
Insurance, 2-3-6, 2-5-1, 2; 2-6-1, 2-8-15, 2-10-3, 2-11-12, 13; 3-12-10
Insurance application, 2-2-2, 2-3-6, 2-5-1, 2-6-1, 2-8-15, 2-11-12, 13; 2-12-7, 3-5-11, 3-12-13
Insurance companies, SPAN, 3-7-5, 3-12-4
Integrated Data Processing, 2-1-12, 2-2-8, 2-3-5, 2-4-12, 3-1-3, 3-6-1
Integrated Systems using IBM 702, 3-11-6
Inter-com timekeeping, 3-7-7
Internal auditing, 3-4-1, 3-5-5, 3-7-5
Internal Auditing and Electronic Data-Processing Machines, 3-5-5
Internal control, 3-1-12, 3-2-5, 2-7-3, 2-9-9
Inventory, 2-2-1
Inventory Control, 2-1-1, 4, 15; 2-2-1, 11; 2-5-9, 2-10-7, 2-9-10, 3-7-4, 3-8-3, 3-10-11, 14; 3-11-3, 12
Inventory count, 2-9-10
Inventory policy, 2-7-3
IPC - integrated procedures control, 3-5-3
Israel, Marion S., 3-6-3
Italian indexing center, 2-12-7
Jacobson, Dr. Arvid, 2-2-13

Job opportunities, 2-12-10
Job Shop Scheduling Model, 3-2-14
Job status, 2-2-15
Job titles & qualifications, 2-12-13
Job titles, programing, 2-12-13
John Hancock Insurance file maintenance, 3-12-10
John Hancock Mutual Life Insurance Co., 2-12-7
Johnson, Gordon K., 2-11-8
Justifying the use of an automatic computer, 2-1-11
Kates, Dr. J., 2-11-3, 7
Kaufman, Felix, 3-3-1
KCS Data Control Ltd., 2-11-3, 7
Kennametal, 2-1-5
Kent, Allan, 3-6-7
Keystone Auto Casualty Co., 2-11-13
Kidde Warehousing System, 2-3-4
Kircher, Paul, 2-4-12, 2-5-5, 3-3-4, 3-12-13
Klein, Martin L., 2-1-14
Kliever, Waldo H., 2-1-15
Klingman, Herbert F., 2-7-2
Kodak Minicard, 2-2-7
Kodak-Addressograph, 2-2-9, 2-4-11, 2-7-16
Koontz, Monroe M., 3-2-7
Kozmetsky, George, 2-5-5
Laboratory for Electronics, 2-6-10
Laden, Dr. H. N., 2-8-1
Language, analysis, 3-8-6, 3-11-8
Large Scale Digital Computers-An Annotated Bibliography, 3-11-12
Laubach, Peter B., 3-4-6
Leo Computers Ltd., 2-6-6, 2-8-14
Lerner, Irwin L., 2-1-14
Levin, Howard S., 2-6-3, 4; 3-3-2
Library, computer program, 2-4-10
Librascope, 2-2-8, 2-4-11
Lieberman, Irving J., 2-10-1
Life insurance, 2-12-7, 3-2-7
Linear decision rule, 2-4-9
Linear programing, 2-2-12, 2-3-14, 2-5-7, 2-5-8, 2-6-12, 13; 3-8-5, 3-10-14
Literary data processing, 3-9-10
Literary data processing center in Italy, 2-12-7
Little, Arthur D. Inc., 2-8-4
Livesey, Everett J., 2-11-11
Locke, William N., 2-3-9, 2-6-7
Lockheed Aircraft Corp., 2-12-5
London Clearing Bankers, 3-6-7
Low price field, 2-6-10
Machine accountant and IDP, 3-1-14
Machine errors, 3-3-10
Machine literature searching, 2-8-7, 2-9-15
Machine translation, 2-3-9, 2-6-7, 2-9-15, 3-1-12
Macdonald, Neil, 2-2-1
MacMichael, Ethan S., 2-4-2
Magee, John F., 2-7-3
Magnetic code on source documents, 3-1-14
Magnetic files, 2-5-14
Magnetic ink, 3-8-12
Magnetic ink character recognition, 2-9-7, 2-12-8
Magnetic tape file maintenance, 3-12-10
Magnetic tape sorting, 3-4-13, 3-12-11
Magnetic tapes, 2-1-8
Magnetic tape storage, 3-8-11, 3-9-11
Mailing list application, 2-2-9, 2-4-11
Mailing list equipment, 2-7-16
Maintenance of tape files, 3-12-10
Man and Automation, 3-2-6
Management & EDP, 3-9-5
Management and electronics, 2-7-1, 2-8-2, 2-9-1, 4; 2-11-1, 3, 4; 2-12-9, 3-1-1, 3, 5; 3-2-1, 4; 3-12-1, 7
Management & systems, 2-12-1, 3
Management by Exception, 3-6-3
Management control, 2-7-10, 2-9-8, 2-12-3, 9; 2-5-5, 3-3-4, 3-5-1
Management decision-making game, 3-6-4
Management Directions, 3-6-3
Management reports, 3-1-11
Management science, 2-6-12, 13; 3-6-3
Management science group, 3-2-14
Mann, Alan O., 3-1-3
Manufacturing control, 2-12-5
Manufacturers, Computers, 3-4-10
Marley, John L., 2-8-5
Math background for OR, 3-4-14
Math dictionary, 3-6-5
Mathematical model for integrated business systems, 2-10-1
Mathematics, 3-9-4
Matthies, Leslie, 2-12-1
McCloskey, Joseph F., 3-2-16
McCollum, R. C., 2-2-14
McCracken, D. D., 2-11-14
Mechanical tape devise, 3-7-12
Mechanical paper tape punching unit, 3-1-15
Mechanical translation, 2-6-7, 2-9-15
Mechanization of check handling, 2-3-10
Mechanization in libraries, 3-4-12
Mechanized patent searching, 2-9-15

Medical record-keeping by electronics, 2-12-8
"Memory dump," 2-6-11
Memory honeycomb, 2-12-12
Merchandising, 3-5-11, 12
Methods Engineering Council, 3-10-14
Micro filmed punched cards, 3-7-13
Micro image data storage, 2-9-12
Micro image file, 2-9-12
Minicard, 2-2-7, 3-12-2
M.I.T., 2-5-6, 7; 2-6-6
MITAB, 3-9-12
Model for integrated business systems, 2-10-1
Moore Business Forms, 2-4-8
MoPar inventory control, 3-10-11
MoPar Division, Chrysler Corp., 2-1-1
MTM Transrecorder (Univac), 2-7-16
Multiple-Address Magnetic-Tape Transport 3-11-5
Multiple tape unit, 2-9-12
Murphy, Eugene, 3-4-7
Music Transposition by Computer, 3-10-9
NACA, San Diego, 3-1-19
National Bureau of Standards, 3-8-6
Nationwide Insurance, 2-2-2
Navy EDP, 3-6-6
Navy EDP philosophy, 3-5-1
Navy Management Review (special issue), 3-6-6
NBS, 2-9-12
NCR, 2-1-6, 2-2-9, 2-6-9
NCR 304 built-in automatic programing, 3-6-11
NCR Intercoupler, 2-2-9
NCR's Post-Tronic, 2-6-9, 3-6-12
Nemerever, Dr. Leon, 2-2-10
New England Mutual Life Insurance Co., 2-5-15, 2-16-14
New York Life Insurance Co., 2-5-1
NMAA, 2-1-4, 11, 2-6-7, 2-11-5
NMAA Convention papers, 1956, 2-11-5
NMAA Electronic Business Systems Conf., 2-6-7, 3-12-17
NMAA-Los Angeles-Management Course, 2-12-20
NMAA Western Div. EBS Conference Proceedings, 3-5-9
Noe, Jerre D., 2-6-7
NORC, 2-8-10
Northrop Aircraft, 2-8-14
Northwest Orient Airlines, 3-10-12
Norwich, England, 3-11-8
Number systems, 2-1-14
Numeric sorting, manual, 3-11-9
Office Automation, 2-1-12, 2-3-3, 2-6-3, 2-6-10, 2-8-9, 3-1-13, 3-4-5, 7, 8; 3-5-3 3-6-8, 3-10-3
Office design for programers, 2-9-7, 2-6-8
Office equipment, 2-3-5
Office functions, 2-2-14
Office Management Supplement, 2-8-3
Office Research Institute, 3-6-1
Office Work & Automation, 2-6-4
"Open" shop, 3-8-9
Operations analysis, 2-3-12
Operations by smaller companies, 3-10-15
Operations Research, 2-4-9, 2-4-13, 2-7-17, 2-12-11, 3-3-8, 3-4-12, 14; 3-7-1, 3-11-3
Operations Research Applied, 3-9-3
Operations research bibliography, 2-12-11
Operations research conference, 2-3-13
Operations Research Digest, 2-1-15
Operations Research for the Businessman, 3-9-3
Operations Research for Management, 3-2-16
Operations research in computer acquisition and use, 2-5-6
Operations Synthesis, 3-9-1
O.R., 2-5-10, 3-9-1
OR as industrial engineering, 2-12-11
OR, England
OR function, 2-5-7
OR in production control, 2-5-8
OR in sales effort, 3-8-1
OR, inventory control, 2-5-9
OR study, Harvard, 2-5-10
ORRadio Industries, 2-1-8
Pacific Mutual Life Insurance Co., 2-5-2, 2-10-3
PACT, 3-5-14
Pan American Airways, 2-3-6, 2-11-9
Paper tape, 2-1-12, 13
Paperwork automation, 3-11-11
Paperwork Simplification, 3-5-4
Parallel adder, 2-9-12
Part number control, 2-5-3
Patent search, electronic, 3-4-8
Payroll application, 3-10-7
Payroll by Teletype, 3-10-11
Peat, Marwick Mitchell & Co., 3-4-10
Peoples Gas Light and Coke Co., Chicago, 2-2-14
Perry, James W., 2-8-7, 3-6-7

Personnel, 2-1-11, 2-2-13, 15; 2-5-2, 2-6-5, 2-9-2, 3; 2-9-7, 2-10-4
Personnel, programing, 2-12-13, 3-1-16
Personnel qualifications, 2-6-5
Personnel relations, 2-6-6, 2-9-2, 2-12-10, 3-5-2
Personnel requirements for EDP System, 2-12-13
Personnel selection, 3-12-15
Personnel Selection by Computer, 3-11-8
Personnel training, 2-1-17, 2-2-13, 2-9-3
Philco Transac Model S-2000, 3-7-13
Physical facilities for computer, 3-4-9
Pioneering in electronic data processing, 2-10-4
Pinkerton, Paul W., 3-2-1
Pipeline application, 2-12-8
Pittenger, Joseph H., 2-3-8
Planning for EDP, 3-10-3, 4; 3-11-9
Planning for electronics, 2-2-14, 2-3-7, 8, 10; 2-4-1, 2-5-1, 5; 2-7-14, 2-10-2, 3; 3-5-8; 3-12-7
Point of Sale, 2-3-3, 2-9-9
Point-O'-Sale Recorder, 2-3-3, 2-9-9, 3-3-5, 3-5-13, 3-10-11
Port of New York Authority, 2-7-2
Porter, F. J., 2-3-1, 2-4-3
Posting Checks by Electronics, 3-6-12
Postley, J. A., 2-2-5
Postronic (NCR), 2-1-6, 2-6-9
Potter Instrument Co., 3-4-12, 3-11-5
Potter RAM, 3-9-11
Poultry feed mix, 3-10-12
"Practical" Approach To Electronics, 3-1-1,5
"Practical" vs. "Visionary" approach, 2-12-3
Practical vs visionary planning, 2-7-1, 3-11-9
Preparing for electronics, 2-11-1, 7; 2-4-1, 5; 2-8-2, 2-9-4
Pre-qualified checks, 3-7-9
Price, Waterhouse & Co., 2-5-11, 2-10-4, 3-4-1
Printed Material Transmitted by Phone, 3-6-12
Printer, high speed, 3-11-5
Private line channels, 3-11-5
Proceedings, Automatic Coding Symposium, 3-6-11
Proceedings, Conf. on O.R., Computers & Mgmt. Decisions, 3-11-3
Proceedings, Conference on the Practical Utilization of Recorded Knowledge, 3-6-7
Proceedings of Automation-A Conference for Executives, 3-6-7
Proceedings of Computer Applications Symposium, 3-10-8
Proceedings, Second Annual EBS Conference, 3-5-9
Process control (Cummins Engine Co.), 3-11-3
Proctor & Gamble, 3-11-7
Production control, 2-1-5, 2-2-15, 2-5-8, 2-11-8, 2-12-5, 3-8-8, 3-9-9, 3-11-3
Production scheduling, 2-8-12, 14; 2-5-8, 2-6-11, 2-7-3
Program Control Techniques, 3-2-9
Program library, 2-4-10
Program Maintenance, 3-11-1
Program packages, 2-9-14
Programer's qualifications, 3-4-9
Programing, 2-11-14, 3-2-13, 3-8-13, 3-10-6
Programing, basic text, 3-7-13
Programing control, 3-9-8
Programing personnel and job titles, 2-12-13
Programing training, 3-11-2
Purchase of EDP equipment, 2-8-3, 3-1-5
Purchasing applications, 2-7-15, 2-11-13
Purchasing electronic equipment, 2-8-3
Qualifications (job), 2-6-5
Queuing theory, 2-6-13
Railroad Applications, 3-7-3, 3-8-12
Railroads, 2-1-5, 2-2-2, 3, 2-3-3, 2-6-5, 6, 8; 2-11-12, 2-8-1, 3-10-12
Railroads, labor, 3-10-8
Railway car reporting, 2-1-5
RAM indexing, 3-2-12, 3-9-11
RAMAC, 2-11-14, 3-12-13
Ramo-Wooldridge Corp., 2-1-3, 2-4-10, 2-5-8
RAND Corp., 2-2-5
Random access, 2-5-11, 2-6-9, 3-6-10, 3-7-11, 3-9-11, 3-10-10
Rawlings, Gen. E. W., 2-9-1
RCA BIZMAC, 3-10-1
RCA Electrofax, 2-7-16, 2-10-9
RCA Ultratype Camera, 2-10-8
Rea Company (J. B.) film lecture, 2-10-10
Reading list, basic, 2-2-16, 3-2-18
Recognition of data, 3-9-14
Record Controls Inc., 2-8-5
Records retention, 2-8-5
Reference Guide, Controllership Foundation, 3-4-10
Reference Guide to EDP literature, 2-8-4
Refinery inventory system, 3-8-3

Reliability of EDP System, 3-7-10
Remington point of sale recorder, 3-10-11
Remington Rand, 2-1-8, 2-3-5, 2-6-15
Rent vs. buy, 3-3-15, 3-8-7
Reservation systems, 2-8-9
Reservisor, 2-2-2, 3; 2-3-3, 2-5-14, 3-10-10
Reserwriter (IBM), 2-8-9
Real-time system design, 3-7-10
Retail applications, 2-9-9, 11, 3-5-11, 12, 13; 3-10-11
Retail Stores, 3-3-5
Retrieval, 3-7-6
Robinson, J. W. Co., 3-5-13
Ross, John H., 3-6-1
Ross, R. R., 2-7-1, 13; 3-1-1, 2-12-3
Rowlands, H. W., 3-4-8
Ruly English, 2-9-15
Russian computers, 2-2-15
Sales areas, OR study, 3-8-1
Sales statistics applications, 3-9-10
Sales tage converter, 2-1-8, 2-3-3
Samas, 2-1-8
Savings and mortgage operations, 3-12-7
Savings bank applications, 2-10-8, 2-11-10, 11 3-1-15
Savings bank operations, 2-2-2
Savings Bank Research Group, 2-11-11
Scandex, 2-3-5
Scheduling, 3-11-3
Scheduling board, 2-9-14
Scheduling computer jobs, 2-9-14
Schoeller, V. Donald, 2-11-1
Scientific American, 2-8-7
Scientific computer used for business application, 2-12-5
Scientific management, 2-6-12, 13; 2-11-1
Scully, G. V., 3-4-13
SEAC, 3-8-6
Sears Roebuck, 3-5-12
Selection and application of data processing equipment and systems, 2-1-3
Selection by DPD, 3-2-18
Selection of equipment, 2-8-8
Sensitronic, 2-1-6
Service bureau, 2-8-15
SHARE, 3-5-14
Shared Programing Groups, 3-5-14, 3-11-19, 3-12-12
Sharing computer time, 2-8-6, 2-12-5
Shepard Laboratories High Speed Typer, 3-11-5
Shera, Jesse H., 3-6-7
Simpler Statements and Service Charges Through Automation, 3-5-10
Sisson, Roger L., 2-2-4
Six Types of Firm - And the Management Data They Need, 3-5-6
Slater, Robert E., 2-3-6, 2-12-7
Small bank EDP, 3-7-6
Small Bank Starts Electronic Check Posting, 3-5-10
Small office computers, 2-6-10
Smith, A.O. Corp., 2-9-5
Solartron Electronic Group Ltd., 3-4-11
Sorting, 2-9-12, 2-10-6, 3-4-13
Sorting by address calculation, 2-10-6
Sorting by tape, 3-12-11
Southern Pacific RR, 3-7-3
Southern RR, 2-6-8, 3-8-12
SPA, 3-9-6
SPA educational committee, 3-12-15
SPAN, 3-7-5, 3-12-4
Spinning Wheel, 2-5-15, 2-6-14
Spooner, Peter, 3-7-1
Standard & Poor, 3-5-12
Standard Register Co., 2-2-8, 2-10-7, 9; 3-11-11
Stanford Research Institute, 2-1-15, 2-6-7, 3-4-11, 3-8-12, 3-12-3, 5
Stanomatic, 2-3-5, 3-1-14
State Mutual Insurance, 2-3-6
Statistical control, 3-6-3
Steele, Floyd G., 3-5-7
Steele, Ford, 2-11-6
Stevens, J. P. & Co., 2-4-4
Stewart-Warner Data Processing Machine, 3-11-13
Stock analysis, 2-9-11
Stock market analysis, 2-9-11
Stocks applications, 3-5-12
Storage costs, 3-7-15
Storage, honeycomb, 2-12-12
Stowens, Bernard H., 3-2-14
Summers, J. R., 2-9-3
"Super automation," 3-8-5
Supervision of EDP System, 2-6-5
Survey of users, 3-12-6
Swank Inc., 2-8-6
Sylvania, 2-9-6, 3-3-3
System Planning and Control-Report #12-AMA, 2-12-3
Systematics, 2-2-9, 3-5-10
Systems analysis, 2-2-15, 2-3-12, 2-4-12, 2-9-13, 2-11-14, 3-5-4, 3-10-3, 3-11-11

Systems and Procedures, 3-10-2
Systems & Procedures Assoc., 2-6-8
Systems design, 2-3-1, 2-5-4, 2-12-1, 3; 3-7-11, 2-10-2, 3, 4, 6; 3-12-3
Systems engineering, 2-2-4, 11, 14; 2-4-7, 2-12-3, 3-4-4, 5; 3-5-3, 3-6-1, 3-7-10, 3-11-9, 3-12-7, 8
Systems - Four levels, 3-8-14
Systems personnel, 3-12-15
Systems Planning, 3-3-2
Systems Study, 2-6-3, 4, 15; 2-9-6
Tab equipment, 2-8-8
TapeDRUM, 2-6-9, 2-8-11
Tape file maintenance, 3-12-10
Tape files, 2-2-1, 2-3-1, 6
Tape handler, 3-4-12
Tape identification, 2-6-11
Tape sorting, 3-12-11
Tax payments, 3-11-8
Telecomputing Corp., 2-3-3
Teleregister, 2-2-2, 3; 2-3-3, 2-5-14, 2-8-15, 2-9-11
Teletype equipment, 2-10-9
Teletype order processing, 2-1-5
Tests for Selection of programmers, 3-1-16
TIM, 2-6-9, 10; 3-2-14
Timekeeping, intercom, 3-7-7
Timestudy, 3-7-8
Toan, A. B. Jr., 3-2-5
Toll, Philip A., 3-2-14
Top management & electronics, 2-12-9
Toronto, University of, 3-8-3
Training, 2-1-17, 2-2-13, 2-4-9, 2-5-2, 2-6-5, 2-10-10, 3-4-11
Training film, 2-2-16, 2-6-16, 2-10-10, 2-12-21, 3-7-16
Training, high school level, 2-9-7
Training, IBM 650, 3-11-2
Training in universities, 3-6-15
Training personnel, 2-9-3, 3-4-9
Training, young children, 2-9-8
Transac, 3-7-13
Transfer function in company planning, 2-11-8
Transrecorder, 2-7-16
Trends in EDP, 3-1-13, 17
TV Office duplicator, 3-4-11
Typatape, 2-12-12, 3-1-15, 3-7-12
Types of business, 3-5-6
UCLA film, 2-12-21
Underwood, 2-1-8, 2-6-10
United Air Lines, 3-12-13
Univac Airlines Reservations System, 2-10-7
Univac Computing Center, 2-9-14
Univac File Computer, 3-12-11
Univac Generalized Programming, 3-6-13
Univac MTM Transrecorder, 2-7-16
Univac Reservation System, 2-8-9
Univac university courses, 3-6-15
University courses (Univac), 3-6-15
University of Michigan, 2-6-5
USAF, 2-9-10
USE, 3-5-14
U. S. National Bank of Portland, 3-5-10, 3-11-9
U. S. Patent Office, 2-9-15, 3-8-6
Utilities applications, 2-10-2, 3-12-4
Utilities installations, 3-11-10
Variable word length, 2-11-14
V.A. Dept. of Insurance, 3-8-10
Vazsonyi, A., 2-5-8
"Visionary" approach to electronics, 3-1-1
Vocational guidance, programing, 2-12-9
Waddell, R. M., 3-1-11
Waiting line problem, 2-5-9
Waiting lines in office operations, 2-5-11
Wallace, Frank, 3-2-6
Ward, J. B., 3-2-13
Watson Scientific Computing Lab., 3-11-2
Waybill information, 2-1-5
Wayne University, 2-2-13
Weather Records Center, 3-7-13
Weinberg, Robert S., 2-7-10
Welch, W. Evert, 3-7-4
Western Data Processing Center, 3-9-16
Western Joint Computer Conference, 2-3-15
Western Reserve School of library science, 3-6-7
Western Reserve University, 3-4-12
Western Union, 2-10-9
Westinghouse Electric Corp., 2-2-11
Whitney, Bernard, 2-5-6
Wide magnetic tape, 2-4-11
Woellner, D. A., 2-4-5
Woodbridge, John S., 2-11-9
Woodbury, David O., 3-4-7
Woodward & Lothrop, 2-9-11
Word length, variable, 2-11-14
Work Simplication, 3-5-4
Workshop for Management (SPA), 2-6-8
Yale University, 3-2-6
Year Book-Office Management, 3-6-8
Young, Douglass A., 2-2-11
Xerographic printer, 2-10-9